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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,695	07/23/2001	Reto Schoeb	015258-053700US	6977

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EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 12/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/912,695

Applicant(s)

SCHOEB, RETO

Examiner

David L. Sorkin

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because the section lines and views fail to comply with 37 CFR 1.84(h)(3) which states that "The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view". For example "A - - A" should be 16 - - 16 or XVI - - XVI and "C - - C" should be 14 - - 14 or XIV - - XIV. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure should not refer to specific claim numbers because the claims may be amended and/or renumbered during prosecution. See page 1, lines 7, 8, 24 and 27. Also page 1, line 24 incorrectly states that claim 2 is dependent.
3. References to the sectional views should be corrected in accordance with the drawing changes required above.

### ***Claim Objections***

4. In claims 11 and 12, the reference character "10" apparently should be - - 2 - -.
5. In claim 14, "appoaratus" should read - - apparatus - -.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 2, 3, 5, 6 and 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. In claim 2 there is lack of antecedent basis for each of the following terms: "the agitator", "the first end section of the bar magnet", "the float body", and "the second end".

9. In claim 3, there is lack of antecedent basis for "the first end section".

10. In claim 5, there is lack of antecedent basis for "the second end section".

11. In claim 6, there is lack of antecedent basis for "the bar".

12. Claim 10 is rendered indefinite by the phrase "in particular a magnetic stirring apparatus (1) in accordance with one of the preceding claims".

13. In claim 10, there is lack of antecedent basis for "said permanent magnets". The phrase "a permanent magnet" is not considered sufficient antecedent basis for "said permanent magnets". It must be clear how many magnets are required by the claim.

14. The scope of claim 15 is unclear due to the phrase "and an agitating device". Parent claim 1 requires "an agitator". It is unclear whether an additional "agitating device" is required in combination with the "agitator" or if this is merely a redundant recitation. If an addition structure is being recited, it is unclear what subject matter in the disclose the "agitating device" corresponds to.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-3, 6, 9, 10, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Keller (US 4,960,521). Regarding claim 1, Keller ('521) discloses a magnetic stirring apparatus comprising an agitator (13), at least one permanent magnet (23) and a float body (14), which are connected to one another. Regarding claim 2, Keller ('521) discloses a magnetic stirring apparatus comprising a bar (12), with an agitator (13) being arranged at a first end section of the bar and a float body (14) being arranged at a second end section. Regarding claim 3, the stirring apparatus tapers into a tip in the region of a first end section (for example at 18 or for example the bottom portion of 13 as seen in Fig. 2). Regarding claim 6, at least one vane (for example 19) is arranged at a bar). Regarding claim 9, the agitator is bar shaped (see Figs. 1-3). Regarding claim 10, Keller ('521) discloses an agitating device having a permanent magnet (23) and a float body (14) and comprising a magnetic drive apparatus (24) said drive apparatus and said permanent magnet of the magnetic stirring apparatus being mutually matched, arranged and designed such that they form a magnetic coupling (see Fig. 5; col. 2 line 66 to col. 3 line 2). Regarding claim 14, the device has a toe bearing (a bottom portion of 13). Regarding claim 15, Keller ('521) discloses a bioreactor (11, 12, 13, 14, 25) comprising a magnetic stirring apparatus according to claim 1 and an agitating device.

17. Claims 1-3, 5, 7-10 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 58-119329 A. Regarding claim 1, JP ('329) discloses a magnetic

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stirring apparatus comprising an agitator (5), at least one permanent magnet (6/6'/6'') and a float body (4/4'/4''), which are connected to one another. Regarding claim 3, the stirring apparatus tapers into a tip in the region of a first end section (see for example Fig. 4). Regarding claim 5, the float body (4) has an increasing inner cross-section (see Fig. 2). Regarding claim 7, a permanent magnet (6') is arranged in the float body (see Figs. 4 and 5). Regarding claim 8, the float body (4'') is formed in an annular shape (see Fig. 6). Regarding claim 9, the agitator is made in a bar shape (see Fig. 2). Regarding claim 10, JP ('329) discloses an agitating device having a permanent magnet (6/6'/6'') and a float body (4/4'/4'') and comprising a magnetic drive apparatus (3) said drive apparatus and said permanent magnet of the magnetic stirring apparatus being mutually matched, arranged and designed such that they form a magnetic coupling (see Fig. 3). Regarding claim 15, JP ('329) discloses a bioreactor (1,3, 4/4'/4'',5, 6/6'/6'',7) comprising a magnetic stirring apparatus according to claim 1 and an agitating device.

18. Claims 1, 3, 5-10, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Harker et al. (US 2,958,517). Regarding claim 1, Harker ('517) discloses a magnetic stirring apparatus comprising an agitator (42, including its Teflon coating), at least one permanent magnet (the magnet of 42) and a float body (36), which are connected to one another. Regarding claim 3, the stirring apparatus tapers into a tip in the region (40) of a first end section (see Fig. 2). Regarding claim 5, the float body (36) has an increasing inner cross-section (see Fig. 2). Regarding claim 6, at least one vane (42) is arranged across a bar (34). Regarding claim 7, a permanent magnet (the magnet of 42) is arranged in the float body (see Fig. 2). Regarding claim 8, the float

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body (36) is formed in an annular shape (see Fig. 2). Regarding claim 9, the agitator is made in a bar shape (see Fig. 2). Regarding claim 10, Harker ('517) discloses an agitating device having a permanent magnet (42) and a float body (36) and comprising a magnetic drive apparatus (46) said drive apparatus and said permanent magnet of the magnetic stirring apparatus being mutually matched, arranged and designed such that they form a magnetic coupling (see Fig. 2). Regarding claim 14, the device has a toe bearing (40). Regarding claim 15, Harker ('517) discloses a bioreactor (10,36,42,46) comprising a magnetic stirring apparatus according to claim 1 and an agitating device.

19. Claims 1, 3-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by de Bruyne (US 4,498,785). Regarding claim 1, de Bruyne ('785) discloses a magnetic stirring apparatus comprising an agitator, at least one permanent magnet (35/44/54/136) and a float body (31/41/51/132,134), which are connected to one another. Regarding claim 3, the stirring apparatus tapers into a tip in the region of a first end section (see Figs. 1,4,5,9). Regarding claim 4, the agitator is formed symmetrically; and at least two permanent magnets are symmetrically arranged in the agitator (see col. 5, lines 10-14; figures). Regarding claim 5, the float body (36) has an increasing inner cross-section (see Figs. 1,2,8, 9). Regarding claim 6, at least one vane is arranged across a bar (see Figs. 8 and 9). Regarding claim 7, a permanent magnet (35/44/54/136) is arranged in the float body. Regarding claim 8, the float body is formed in an annular shape (see Figs. 2-5, 8,9). Regarding claim 9, the agitator is made in a bar shape (see Fig. 2). Regarding claim 10, de Bruyne ('785) discloses an agitating device having a permanent magnet (35/44/54/136) and a float body (31/41/51/132,134)

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and comprising a magnetic drive apparatus (10/110) said drive apparatus and said permanent magnet of the magnetic stirring apparatus being mutually matched, arranged and designed such that they form a magnetic coupling. Regarding claim 11, the drive (10) has permanent magnets (12), which form a magnetic coupling together with the permanent magnets of the magnetic stirring apparatus. Regarding claim 12, the drive apparatus (110) has a plurality of electromagnetic coils (114,116,118) which form an electric motor together with the permanent magnets of the magnetic stirring apparatus. Regarding claim 13, the permanent magnets of the magnetic stirring apparatus and the permanent magnets (12) of the drive apparatus (10) are arranged and formed such that they mutually form a passive radial and/or axial magnetic bearing (see Fig. 1). Regarding claim 15, de Bruyne ('785) discloses a bioreactor comprising a magnetic stirring apparatus according to claim 1 and an agitating device (see Figures and discussion of claims 1 and 10 above).

### ***Conclusion***

20. The prior art references made of record and not relied upon are considered pertinent to applicant's disclosure. While one or more of these references may also anticipate or render obvious one or more of the instant claims, the examiner is required by MPEP 706.02 to avoid cumulative rejections. Likewise, references listed in the IDS and not relied upon by the examiner may also anticipate or render obvious one or more of the instant claims for this reason.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David Sorkin

December 4, 2002



CHARLES E. COOLEY  
PRIMARY EXAMINER